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(FILE 'HOME' ENTERED AT 16:44:43 ON 11 FEB 2006)

     FILE 'REGISTRY' ENTERED AT 16:44:49 ON 11 FEB 2006
                E "DILTIAZEM"/CN 25
L1            1 S E3
                E "DILTIAZEM"/CN 25
                E "CINNARIZINE"/CN 25
L2            1 S E3
                E "NIFEDIPINE"/CN 25
L3            1 S E3
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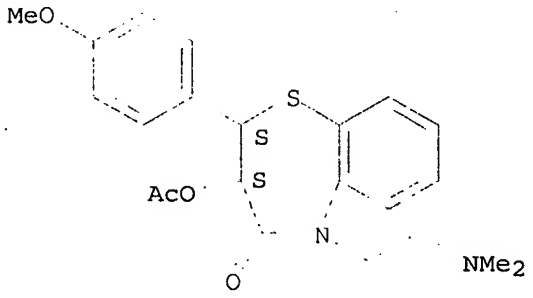
L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 42399-41-7 REGISTRY
CN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, (2S,3S)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, (2S-cis)-
OTHER NAMES:
CN (+)-cis-Diltiazem
CN (+)-Diltiazem
CN Adizem XL
CN Cartia XT
CN Coras
CN d-cis-Diltiazem
CN d-Diltiazem
CN **Diltiazem**
CN Dilzem
FS STEREOSEARCH
MF C22 H26 N2 O4 S
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, HSDB*, IFICDB, IFIUDB, IMSCOSEARCH, IMSPATENTS, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); USES (Uses)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4662 REFERENCES IN FILE CA (1907 TO DATE)
  69 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4665 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 298-57-7 REGISTRY
CN Piperazine, 1-(diphenylmethyl)-4-(3-phenyl-2-propenyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Piperazine, 1-cinnamyl-4-(diphenylmethyl)- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 1-(3-Phenylallyl)-4-(diphenylmethyl)piperazine
CN 1-Benzhydryl-4-cinnamylpiperazine
CN 1-Cinnamyl-4-(diphenylmethyl)piperazine
CN 1-Cinnamyl-4-benzhydrylpiperazine
CN 1-Diphenylmethyl-4-cinnamoylpiperazine
CN 516MD
CN Aplactan
CN Aplexal
CN Apotomin
CN Artate
CN Carecin
CN Cerebolan
CN Cerepar
CN Cinaperazine
CN Cinazyn
CN Cinnacet
CN Cinnageron
CN **Cinnarizine**
CN Cinnipirine
CN Corathiem
CN Denapol
CN Dimitron
CN Dimitronal
CN Eglen
CN Folcodal
CN Giganten
CN Glanil
CN Hilactan
CN Ixterol
CN Katoseran
CN Labyrin
CN Lazeta
CN Marisan
CN Midronal
CN Mitronal
CN N-Benzhydryl-N'-cinnamylpiperazine
CN Olamin
CN Processine
CN R 1575
CN R 516
CN Sedatromin
CN Sepan
CN Siptazin
CN Spaderizine
CN Stugeron
CN Stutgeron
CN Stutgin
CN Toliman
FS 3D CONCORD
MF C26 H28 N2
CI COM
SR CA
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

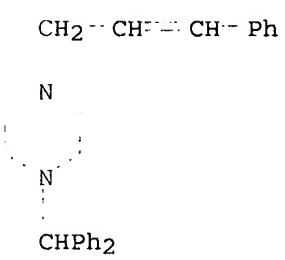
DT.CA CAplus document type: Book; Conference; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

735 REFERENCES IN FILE CA (1907 TO DATE)
23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
735 REFERENCES IN FILE CAPLUS (1907 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 21829-25-4 REGISTRY
CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(o-nitrophenyl)-, dimethyl ester (8CI)
OTHER NAMES:
CN 2,6-Dimethyl-3,5-dicarbomethoxy-4-(2-nitrophenyl)-1,4-dihydropyridine
CN 2,6-Dimethyl-4-(2-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylic acid dimethyl ester
CN 4-(2-Nitrophenyl)-2,6-dimethyl-3,5-dicarbomethoxy-1,4-dihydropyridine
CN Adalat
CN Adalat 10
CN Adalat 20
CN Adalat 5
CN Adalat CC
CN Adalat CR
CN Adalat Crono
CN Adalat FT
CN Adalat GITS
CN Adalat GITS 30
CN Adalat LA
CN Adalat LP
CN Adalat Oros
CN Adalat PA
CN Adalat Retard
CN Adalate
CN Adapine
CN Adapress
CN Alat
CN Aldipin
CN Alfadat
CN Alonix
CN Alonix S
CN Alpha-Nifedipine Retard
CN Angipec
CN Anifed
CN Anpine
CN Apo-Nifed
CN Aprical
CN BAY 1040
CN BAY-a 1040
CN Bonacid
CN Calcibloc
CN Calcigard
CN Calcilat
CN Camont
CN Cardifen
CN Cardilat
CN Cardilate
CN Cardionorm
CN Chronadalate
CN Chronadalate LP
CN Citilat
CN Coracten
CN Coral
CN Cordafen
CN **Nifedipine**
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS 3D CONCORD
DR 11104-22-6, 101539-70-2, 101554-38-5
MF C17 H18 N2 O6

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PATDPASPC, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

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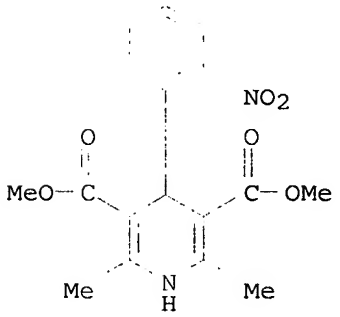
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7627 REFERENCES IN FILE CA (1907 TO DATE)
105 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
7634 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:168901 CAPLUS
DOCUMENT NUMBER: 141:199402
TITLE: Screening of bioadhesive materials for oral sustained-release diltiazem
AUTHOR(S): Li, Yunchun; Fu, Jie; Zhang, Zhirong; Yang, Xiaochuan
CORPORATE SOURCE: Department of Nuclear Medicine, West China Hospital of Sichuan University, Chengdu, 610041, Peop. Rep. China
SOURCE: Zhonghua Heyixue Zazhi (2002), 22(6), 376-378
CODEN: CITCDE; ISSN: 0253-9780
PUBLISHER: Jiangsusheng Yuanzi Yixue Yanjiuso
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
TI Screening of bioadhesive materials for oral sustained-release diltiazem
AU Li, Yunchun; Fu, Jie; Zhang, Zhirong; Yang, Xiaochuan
AB The bioadhesive materials for oral sustained-release diltiazem was screened. The bioadhesion force of adhesive hydroxypropylmethylcellulose (HPMC) polymer, carbomers (Cb), PVPk30 and CMCNa with rat gastric and intestinal mucosa and the excretion rate of the adhesives in gastrointestinal tract of rats were measured to screen the best **bioadhesive material**. The bioadhesive ability of the best **bioadhesive material** was tested in gastrointestinal tract of dogs with in vivo radionuclide tracing imaging. The bioadhesion force of Cb with rat intestinal mucosa (19.6 - 31.0 g) was bigger than that of other materials (4.0 - 24.3 g), and the excretion rate of Cb934 was the slowest in gastrointestinal tract of rats. The Cb934 remarkably increased the retention time of its preparation in the gastrointestinal tract of dogs. Cb934 can be used as **bioadhesive material** of oral sustained-release medicine.

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:434091 CAPLUS
DOCUMENT NUMBER: 122:222710
TITLE: Liposomes-based nasal delivery system of nifedipine: Development and characterization
AUTHOR(S): Vyas, S. P.; Goswami, S. K.; Singh, Ranjit
CORPORATE SOURCE: Pharmaceutics Laboratory, Department of Pharmaceutical Sciences, Dr H.S. Gour Vishwavidyalaya, Sagar (M.P.), 470 003, India
SOURCE: International Journal of Pharmaceutics (1995), 118(1), 23-30
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Liposomes-based nasal delivery system of nifedipine: Development and characterization
AU Vyas, S. P.; Goswami, S. K.; Singh, Ranjit
AB Multilamellar liposomes bearing nifedipine were prepared using a conventional cast film method. The prepared liposomes were evaluated for release characteristics, in vitro, in situ bioadhesion and in vivo absorption following nasal administration. Charged components, stearylamine, dicetyl phosphate and some fusogenic/**bioadhesive material** were also incorporated into the liposomes. It was observed that pos. charged liposomes possessed maximum bioadhesion while lysophosphatidylcholine liposomes showed considerable bioadhesion. In vivo expts. revealed that the nasal administration of liposomes eliminated hepatic first-pass metabolism and could maintain an effective drug concentration for prolonged periods of time with improved bioavailability.

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(FILE 'HOME' ENTERED AT 16:27:29 ON 11 FEB 2006)

FILE 'CAPLUS' ENTERED AT 16:27:42 ON 11 FEB 2006

L1 4717 S CALCIUM (W) CHANNEL (W) BLOCKER

L2 1584 S L1 AND (DILTIAZEM OR CINNARIZINE OR NIFEDIPINE)

L3 15 S L2 AND (PERMEATION (W) ENHANCER) OR (BIOADHESIVE (W) MATERIAL

L4 15 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)

L5 14 S L2 AND (CONTROLLED OR TIMED OR DELAYED)(W) RELEASE